

Reviewer Al Crouten
Date 11/8/85

Form/Permit # 2425
Company Name KWB OIL PROP. MGT. INC.
Well # (b) (9)
Locati [REDACTED]

TECHNICAL REVIEW

Type Injection Well: (EOR/SWD/HC Storage) (New/Conversion) (Active/Inactive)

Injection: (Continuous/Cyclic)

Approximate # days operating/year _____
Rate (B/D): Average _____ Maximum 50
Wellhead pressure (psi): Average _____ Maximum 0
Fluid: TDS _____ Sp. Gr. 1.1 (EST) Analyses included: (yes/no)
Source (formation name) _____

Geologic Data (all references to depths are below land surface)

Base of Historical Usable Water: 100 ft (BASED ON WATER WELL DATA 1.5 MILES TO THE NW)
Base of USDW and how determined: 157 ft. (BASED ON WELL LOG (# G1-25) SW/4)
Injection Interval: Top 1489 ft; Bottom 1544 ft; Effective Thickness _____
Formation name BARTLESVILLE Lithology SAND
Porosity (%) _____ Initial Reservoir Pressure _____ Date _____
Permeability (md) _____
Confining Zones: Thickness between injection zone and USDW _____
Lithology _____
Cumulative shale _____: thickest shale zone _____ (interval)

Well Data: (all references to depths are below land surface)

Surface Elevation: 1273 ft (KB/GL) Total (Depth/Plugged Back Depth) 1550 ft.
Date Drilled or to be drilled: 2/16/29 Date converted: 2/17/29
Type logs available on (this well/offset well): (By reference/included) _____

Test data: (By reference/included) _____

Construction:	Size (in)	Depth Interval	Sacks of Cement	Hole Size	Cement Interval	How Determined
40 lb/ft. - Surface Csg.	<u>10.00"</u>	<u>0-53'</u>	<u>0</u>			
Intermediate Csg.						
20 lb/ft. - Long String Csg.	<u>6.72"</u>	<u>0-1243'</u>	<u>0</u>			
Liner	<u>3.50"</u>	<u>1217-1544'</u>				
17 lb/ft. Tubing	<u>2.38"</u>					
					Packer type and depth	<u>/ 1028 ft</u>

AOR (1/4 mile radius)

Map submitted: (yes/no) _____ Tabulation of Wells Submitted: (yes/no) _____
Faults Located: (yes/no); (none Present/Distance from injection well _____)
Number of wells in AOR: _____
Total _____ (Abandon _____; Production _____; Injection _____)
Number of wells in zone of Endangering Influence: Total _____
Number of wells Requiring Corrective Action: Total _____ (list below)

Well	Type Well	Problem	Corrective Action Required
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Maximum Injection Pressure Calculation $P_m = (\text{Frac Gradient} - (0.433 \times \text{Sp.Gr.})) \text{ depth}$

$$P_m = (0.75 - (0.433 \times 1.1 (\text{EST}))) \times \frac{1489}{1489} = \frac{407}{407} \text{ (psi)}$$

Technical Review (Passed/Failed)

REPORTS A 3.5" LINEAR BUT DOESN'T SAY WHETHER IT WAS CEMENTED.